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Serial No.: 10/003,196 : Group Art Unit: 2623  
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Filed: October 29, 2001 :   
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For: Methods and Apparatus for Presenting : Examiner:  
Interactive Entertainment : Farzana E. Hossain

APPELLANT'S BRIEF

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**1. REAL PARTY IN INTEREST**

This application has been assigned to MVmax LLC, a closely held Delaware Limited Liability Company and small entity. MVmax LLC is the real party in interest.

**2. RELATED APPEALS AND INTERFERENCES**

None.

**3. STATUS OF CLAIMS**

Claims Canceled: 5, 19 and 23.

Claims Pending: 1-4, 6-18, 20-22 and 24 -34.

Claims Allowed: None.

Claims Rejected: 1-4, 6-18, 20-22 and 24-34 (in final action mailed June 22, 2007).

Claims Appealed: 1-4, 6-18, 20-22 and 24-34 (all rejected claims).

**4. STATUS OF AMENDMENTS**

Claim 34 has been amended in an amendment submitted after the filing of the Notice of Appeal but prior to the filing of the present Appellant's Brief pursuant to 37 CFR 41.33(a). The amendment of claim 34 was for the purposes of presented the claim in better form for consideration on appeal. In the event that the proposed amendment of claim 34 is denied entry, Applicant has authorized the cancellation of the claim in the alternative.

**5. SUMMARY OF CLAIMED SUBJECT MATTER**

The invention involves the use of sets of scenes, in this application sometimes called alternative scenes and sometimes called variation scenes, from which an appropriate scene from the set is selected and interspersed into a scene sequence to adapt the scene sequence in response

to interactive decisions made by the viewer. In some of the claims (Independent claims 1, 9, 24, 30,) they are called variation scenes which are interspersed in response to earlier decisions in branching sequences. In others of the claims (Independent claims 4, 18, 27, 31, 32 , they are called alternative scenes which are interspersed into acts or episodes that can be viewed in a different order based upon the order selected.

Branching and order selection are related, but different, interactive decisions. A branching decision at a node of choices eliminates the ability to view the non-selected branches; while an order-selecting decision preserves the ability to view the non-selected branch at a later time. The difference will be apparent in the following summary of the independent claims.

**Independent claim 1** is directed to a method for structuring scene sequences for interactive entertainment to carry the apparent consequences of decisions made prior to a neutral linking scene into selected scene sequences occurring after the linking scene. Steps (a) to (f) are admittedly disclosed in the prior art. (See Paragraph 6 of the Application.) The novelty is in steps (g) and (h).

The admitted prior art of interactive branching includes producing interactive entertainment with an overall storyline to be delivered in a plurality of potentially viewable scenes, depending upon choices between alternative decisions made by an interactive viewer at branching points. To maintain the storyline in the prior art, the branching points and their related scene sequences are structured such that most or all potential paths eventually converge to a linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene. (Paragraph 6 of the Application.)

An important limitation of the prior art branching is that each linking scene essentially resets the storyline, making any decisions that come before the linking scene irrelevant to the content that occurs after the linking scene. This lack of a cumulative consequence to decision-making means that the prior art of interactive entertainment has a very weak narrative structure.

Unlike the prior art, however, claim 1 recites steps (g) and (h) of producing sets of variation scenes that introduce content reflecting the consequence of one or more decisions made prior to the linking scene in order to carry the apparent consequences of the selected decisions past the linking scene. Each set of variation scenes is associated with a scene that is viewable with or after the linking scene. When the viewer is brought to a scene sequence that contains a scene that is associated with a set of variation scenes, the variation scene that is related to the particular decision or combination of decisions made earlier by the user is taken from the set and interspersed into the scene sequence. (Specification: paragraph 13, and paragraphs 44-49.)

Paragraph 7 of the Specification describes more specifically the shortcoming of the prior art that these novel steps were intended to remedy, as follows:

If the user made several relatively 'bad' choices on his way to a linking scene, there is no subtle change in the content of the linking scene, or in scene sequences presented after the linking scene, to reflect the consequences of bad choices. For example, after a series of bad choices in an episode that ultimately lead to the linking scene, the interactive user's character may have his employer say, "Job well done" because that content is predetermined in the linking scene as neutral content. However, that content does not reflect and may be inappropriate in light of the decision paths that the user may have followed in arriving at the linking scene. That is, for a particular decision path, it might be more appropriate

for the employer to say, "What is wrong with you? You could have gotten killed out there. You got lucky it all worked out. Next time, you'd better do things by the book." Thus, in the prior art form of the linking scene methodology, only the decision-neutral content progresses past a linking scene, while the apparent consequences that are specific to particular decisions, whether good or bad, are forgotten and do not produce any variation in scene sequences after the linking scene.

This major shortcoming of the prior art was solved by producing sets of "variation scenes" that can be used to subtly alter the content of scene sequences that may be viewed after passing a linking point. These "variation scenes" are used to slightly modify the content of certain scenes that follow a linking scene in order to make the modified scene reflect some consequence of the previous decisions made by the viewer. (See examples in paragraphs 44-48 and 52-55 of the Specification.)

A prominent use for this type of "variation scenes" is to produce the variation scenes in a set with essentially the same characters and props, such that the variation scenes in a set differ from each other by the dialog and expression of one or more of the characters. (See Paragraph 63 of the Specification.) This allows any scene sequence following a linking point to have its primary content in which the characters follow a general script at a location using the same props, but by the technique of re-shooting a few of the exchanges between characters to allow at least one of the characters to change his or her dialog or expression, the emotional impact of the exchange can be varied in a way that carries over an implication of some consequence of the decisions or behavior of the characters in scenes that preceded the linking point. This is shown in the Figure 4 diagram, where the scene following the linking scene (166) can have a general script at a location using the same props, but be modified by inserting the appropriate "variation.

scen  (180 a, b or c) to allow Harry to vary his dialog and expression to convey a different emotion that implies a consequence of Kelso's behavior prior to the link.

**Independent Claim 4** is directed to a method for structuring scene sequences for interactive entertainment where some of the acts can be presented in a different order. This order-selecting decision, unlike the branching decision, preserves the ability to view the non-selected act at a later time. The novelty of claim 4 is in providing such order selectable acts with both neutral scenes and sets of alternative scenes, such that an appropriate alternative scene can be selected from the set and interspersed into the act to reflect the consequences of previous decisions. (See Paragraphs 15, 38-40, 59-62 and Figure 6.)

**Independent claim 7**, like claim 4, is directed to a method for structuring scene sequences for interactive entertainment where some of the acts can be presented in a different order. The novelty of claim 5 is in providing alternative connecting scenes leading into and out of such order selectable acts in which the alternative connecting scenes contain content that is related to the order in which the act is selected for viewing. (See Paragraph 17 and the original Claim 7.)

**Independent Claim 9** is directed to an interactive entertainment in a digital storage medium that performs the steps corresponding to Claim 1. It includes software-enabled coding to select and insert the appropriate variation scene from the set of alternative variation scenes associated with the past decision(s). (See paragraph 37, 71 and 72 of the Specification.)

**Independent Claim 18** is directed to an interactive entertainment in a digital storage medium that performs the steps corresponding to Claim 4. It includes software-enabled coding to select and insert an appropriate alternative scene from the set of alternative scenes associated

with the past decision(s) on the order in which the scene was viewed. (See paragraph 37, 71 and 72 of the Specification.)

**Independent Claim 24** is directed to an interactive entertainment embodied in an electronic format to be transmitted over a communications network that performs the steps corresponding to Claim 1. It includes software-enabled coding to select and insert the appropriate variation scene from the set of alternative variation scenes associated with the past decision(s). (See paragraph 37, 71 and 73 of the Specification.)

**Independent Claim 27** is directed to an interactive entertainment embodied in an electronic format to be transmitted over a communications network that performs the steps corresponding to Claim 4. It includes software-enabled coding to select and insert the appropriate variation scene from the set of alternative variation scenes associated with the past decision(s) on the order in which the scene was viewed. (See paragraph 37, 71 and 73 of the Specification.)

**Independent Claim 30** is directed to an interactive entertainment embodied in an electronic format to be transmitted over a broadcast network that performs the steps corresponding to Claim 1. It includes software-enabled coding to select and insert the appropriate variation scene from the set of alternative variation scenes associated with the past decision(s). (See paragraph 37, 71 and 73 of the Specification.)

**Independent Claim 31** is directed to an interactive entertainment embodied in an electronic format to be transmitted over a broadcast network that performs the steps corresponding to Claim 4. It includes software-enabled coding to select and insert the appropriate variation scene from the set of alternative variation scenes associated with the past



decision(s) on the order in which the scene was viewed. (See paragraph 37, 71 and 73 of the Specification.)

**Independent Claim 32** is directed to a method for providing interactive entertainment in periodic serial format. The steps include providing a plurality of potentially viewable scenes to deliver an overall storyline in periodic episodes (paragraph 34), enabling the viewer to select the order in which a subsequent episode will be presented, providing alternative connecting scenes (paragraph 17) leading into and out of each episode that can be presented in a different order, and presenting to the viewer, in the subsequent episode determined by his decision, the alternative connecting scenes that are appropriate to the order in which the episode is presented. (See Original claim 32.)

**Independent Claim 34** is directed to an interactive entertainment embodied in a digital video storage medium with a data structure and readable by a digital video player. The data structure includes a plurality of scenes grouped as periodic episodes (paragraph 34) at least one of which presents alternative decisions that will determine the order in which a subsequent episode will be presented. The order selectable episodes have both neutral scenes and sets of alternative scenes (paragraphs 15, 38-40, 59-62 and Figure 6). The data structure also includes means for presenting the alternative scenes. (See Original Claim 34). The means for presenting the alternative scenes to a viewer could include: a television, a general purpose computer and a monitor or a television, a game player and a television, a set-top box and a television, a personal video recorder, and a cable television system. (See paragraph 72 and original claims 11-17.)

## **6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection present for review in this appeal are as follows.

A. Did the Examiner err in rejecting claims 9-18, 20-22, 24-31 and 34 as being unpatentable subject matter under 35 U.S.C. 101?<sup>1</sup>

B. Did the Examiner err in rejecting claims 1-4, 6-10,18, 20-22, 24, 27, 30 and 31 under 35 U.S.C. 102 as being anticipated by Bejan et al (US 5,465,384)?<sup>2</sup>

C. Did the Examiner err in rejecting claims 18, 20-22, 27-29 and 31-34 under 35 U.S.C. 102 as being anticipated by Shiels et al (US 5,754,770)?<sup>3</sup>

D. Did the Examiner err in rejecting claims 11, 13, 14, 16, 17, 25 and 26 under 35 U.S.C. 103(a) as being unpatentable over Bejan in view of Shiels?<sup>4</sup>

E. Did the Examiner err in rejecting claims 12 and 15 under 35 U.S.C. 103(a) as being unpatentable over Bejan in view of Abecassis (US 6,553,178)?<sup>5</sup>

F. Did the Examiner err in provisionally rejecting claim 1 for nonstatutory obviousness-type double patenting of claim 1 of co-pending application 10/003,187 in view of Abecassis?<sup>6</sup>

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<sup>1</sup> Section 9 of Final Office Action mailed 22 June 2007.

<sup>2</sup> Section 12 of Final Office Action mailed 22 June 2007.

<sup>3</sup> Section 13 of Final Office Action mailed 22 June 2007.

<sup>4</sup> Section 15 of Final Office Action mailed 22 June 2007.

<sup>5</sup> Section 16 of Final Office Action mailed 22 June 2007.

<sup>6</sup> Section 17 of Final Office Action mailed 22 June 2007.

## **7. ARGUMENT**

**A. The Examiner erred in rejecting claims 9-18, 20-22, 24-31 and 34 as being unpatentable subject matter under 35 U.S.C. 101.**

The Examiner rejected the above claims as unpatentable subject matter on the grounds of his belief that an interactive entertainment embodied in a digital storage medium or an electronic format to be transmitted over a communications network does not impart functionality to a computer or computing device.

The patentability of data structures is described in MPEP 2106.01. While an intangible data structure that is not claimed to be in a computer readable medium is not statutory subject matter, when the claim is made to a computer-readable medium encoded with a data structure, the claim is statutory. That is the case for each of the rejected claims. Each claim includes a computer readable medium encoded with the above described data structures.

Of course, the encoded data structure must also be functional, as it is in these claims. The example given in MPEP is that a computer that recognizes a sequence of musical notes read from memory, and thereafter causes another defined series of notes to be played, requires a functional relationship among the data and the computing process, and is statutory subject matter. That is the case with these claims.

### **A.1 Claim 9.**

Claim 9 claims an interactive entertainment, readable by a digital video player, embodied in a digital video storage medium that is encoded with a data structure of scenes and rules in the form of software-enabled coding for determining and interspersing the appropriate variation scenes. The Examiner is wrong about claim 9, because the claimed interactive entertainment

clearly includes a data structure in the form of the potentially viewable scenes (including those scenes that are designated as variation scenes and grouped in sets) and the rules for determining when a particular variation scene is selected from a set, in the form of software-enabled coding to apply the rules and determine the selection of a particular scene. The data structure imparts a functionality to a digital video player ('computer') and therefore is functional statutory subject matter.

**A.2 Claims 10-17 stand as a group.**

Claim 10 claims the stored interactive entertainment of claim 9 in combination with a digital video player having the means for enabling the viewer to make the alternative decisions and software able to interpret the coding in the data structure. Claims 11-17 are dependant upon claim 10 and merely identify types of digital video players. Thus, claims 10-17 stand as a group.

The Examiner is wrong about claims 10-17, not only because they depend from claim 9 (itself patentable subject matter) but further because of the additional limitation of a digital video player. This combination is patentable subject matter.

**A.3 Claim 18 and 21 stand as a group.**

Claim 18 claims an interactive entertainment, readable by a digital video player, embodied in a digital video storage medium that is encoded with a data structure that is readable by a digital video player. The Examiner is wrong about claim 18, because the claimed interactive entertainment clearly includes a data structure of potentially viewable scenes grouped as acts and also includes alternative scenes, and has software-enabled coding to apply rules for determining the order in which an act is viewed (in relation to other acts) and to present alternative scenes in the act dependant upon the order in which the acts is presented. Claim 21 is directly dependent

from 18, but the added limitation does not define independent structure. The data structure of claim 18, however, imparts a functionality to a digital video player and therefore is functional statutory subject matter.

**A.4 Claim 20 and 22 stand as a group.**

Claim 20 claims the data structure on a storage medium of claim 18 in combination with a digital video player. Claim 22 is 21 in combination with a digital video player. The Examiner is wrong about claims 20 and 22, not only because they depend from claim 18 (itself patentable subject matter) but further because of the additional limitation of a digital video player. This combination is patentable subject matter.

**A.5 Claim 24-26 stand as a group.**

Claim 24 claims an interactive entertainment embodied in an electronic format to be transmitted over a communications network, with a readable data structure in the form of potentially viewable scenes, including one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions, and software-enabled coding for identifying a variation scene that is selected from a set based upon previous decisions. Claims 25 and 26 merely restrict how the entertainment is sent over a communications network and stored at the receiving end. The data structure of claim 24, however, imparts a functionality to the transmission over the network and therefore is functional statutory subject matter.

**A.6 Claims 27-29 stand as a group.**

Claim 27 claims an interactive entertainment embodied in an electronic format to be transmitted over a communications network with a readable data structure in the form of potentially viewable scenes grouped as a plurality of acts that can be presented in a different

order, including neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed, and software-enabled coding for presenting an alternate scene in the act that is appropriate for the order in which the act is viewed. Claims 28 and 29 merely restrict how the entertainment is sent over a communications network and stored at the receiving end. The data structure of claim 27, however, imparts a functionality to the transmission over the network and therefore is functional statutory subject matter.

**A.7 Claim 30.**

Claim 30 claims an interactive entertainment embodied in an electronic format to be transmitted over a broadcast network, with a readable data structure in the form of potentially viewable scenes, including one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions, and software-enabled coding for identifying a variation scene that is selected from a set based upon previous decisions. The data structure imparts a functionality to the transmission over the broadcast network and therefore is functional statutory subject matter.

**A. 8 Claim 31.**

Claim 31 claims an interactive entertainment embodied in an electronic format to be transmitted over a broadcast network with a readable data structure in the form of potentially viewable scenes grouped as a plurality of acts that can be presented in a different order, including neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed, and software-enabled coding for presenting an alternate

scene in the act that is appropriate for the order in which the act is viewed. The data structure imparts a functionality to the transmission over the broadcast network and therefore is functional statutory subject matter.

#### **A.9 Claim 34.**

Claim 34 has been amended to correct an error and put the claim in better form for appeal. Claim 34 claims an interactive entertainment embodied in a digital video storage medium readable by a digital video player, with a data structure of potentially viewable scenes grouped as a plurality of periodic episodes that have neutral scenes in which the content is not dependant upon the relative order in which the episode is viewed, and sets of alternative scenes in which the content is dependant upon the order, and means for presenting one or more of such alternative scenes in the act to provide the alternative content that is appropriate for the order. The data structure imparts a functionality to the digital video player and is patentable subject matter.

**B. The Examiner erred in rejecting claims 1-4, 6-10, 18 20-22, 24 27, 30 and 31 under 35 U.S.C. 102 as being anticipated by Bejan et al (US 5,465,384).**

#### **B.1 Scope and Content of Bejan.**

The Examiner errs first in his factual determinations as to the scope and content of the prior art disclosed in Bejan. The reference discloses an interactive entertainment system using stored images and means for retrieving and displaying selected images in response to a majority selection by the audience of viewers. In describing an enabling example, Bejan uses the block diagrams of Figures 2 and 3 and the text corresponding to the explanation of the diagrams (starts

on the last paragraph of column 6 and continues to the claims in column 10). There is no other relevant portion of Bejan, and the Examiner does not cite to any other portion.

The Bejan specification describes that FIG. 2 is a block diagram depicting the steps taken by the main computer in carrying out the operations necessary to display a sample interactive episode. The sample episode is divided into three parts: (i) an introduction, (ii) a ‘multi-perspective act’ and (iii) a branching act. Bejan qualifies this particular format by explaining that a sample episode might have only one of those acts, and that the order could be reversed such that the multi-perspective act could follow the branching act.<sup>7</sup>

The purpose of the episode introduction is to familiarize the audience with its polling equipment and to introduce the characters. After the introduction, control is passed to start the ‘multi-perspective act’, in which the audience is allowed to select a character by majority vote. The video image sequence then presented to the audience is a sequence that was filmed from the ‘perspective’ of that character. The audience can change characters during the multi-perspective act, at which time the images presented will shift to images filmed from the perspective of the newly selected character. This process of perspective shifting can continue throughout the multi-perspective act.<sup>8</sup>

The ‘perspective’ of each character (literally his vision of the scene) is created by filming the same scene from a separate camera corresponding to each character. These separate films ‘run’ at the same time in the sense of having corresponding time addresses to each other, so that if

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<sup>7</sup> Bejan: Col. 6, Ln. 52–Col. 7, Ln. 5.

<sup>8</sup> Bejan: Col. 7, Ln. 26-56.



the audience shifts perspective to another character at any time in the act, only the perspective changes, not the plot or series of events.<sup>9</sup>

Thus, in the multi-perspective act, Bejan does teach producing ‘sets’ of images corresponding to each character during the act, but the set of images displayed during the act is based only upon the audience’s choice at the time. Bejan does not introduce into the act any variable content that reflects a consequence of previous decisions. If the audience initially chose character 1 and then switched to character 2 at time  $T + 20$ , they would see the same character 2 image set as they would if they had selected character 3 first, or had selected character 2 initially. Thus, what the multi-perspective act image sets actually represent are a limited form of branching during the act to allow the audience to view the same plot or storyline through the visual reference of the selected character, but the visual reference of that character does not vary because of decisions made for or by that character prior to a linking scene.

What the Examiner appears to rely upon for the basis of some rejections is that the final audience vote in the multi-perspective act is a vote to chose which character to follow throughout the remainder of the episode.<sup>10</sup> After the conclusion of the multi-perspective act, the audience is no longer allowed to change the character perspective during the ensuing ‘branching act’.<sup>11</sup> Thus, the scenes of the branching act that can be viewed after the final character selection are limited to those filmed from the perspective of the selected character. In that limited sense, the branching act scenes do reflect the consequence of the final choice of character, but this is not what is

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<sup>9</sup> Bejan: Col. 7, Ln. 34-38.

<sup>10</sup> Bejan: Col. 9, Ln. 55-61.

<sup>11</sup> Bejan: Col. 8, Ln. 39-49.

claimed in those claims of this application which have been rejected as being anticipated by Bejan.

The branching act of Bejan is classic interactive branching, in which the audience choices determine the alternative directions of the plot. That means the audience's alternative choices lead to image sequences showing a different series of events or plots. Bejan does not teach any use of sets of alternative scenes within the image sequences of the various branches to reflect consequences of decisions made before entering the branching act.

The diagram of Bejan's Figure 3 shows that the branching act can offer multiple branching pathways, represented by 2<sup>nd</sup> and 3<sup>rd</sup> level branching, but following the viewing of the highest level branch (3<sup>rd</sup> in this example), all choices lead to the same "Intersection Scene". The intersections scenes are the classic "linking scenes" as described in the prior art to bring all of the possible branching paths back to the same plot.<sup>12</sup> Further branching is permitted after the intersection scene (4<sup>th</sup> level branches) and the ensuing branches are brought back together at the "Credits" scene, which is itself a form of final linking. Note, however, that nothing in Bejan's Intersection Scene or in the Credits is varied by the use of images selected from sets of variation scenes to introduce content that reflects decisions made during the branching.

Once this understanding of the scope and content of Bejan is appreciated, it is clear that the claims rejected contain subject matter not disclosed by Bejan, as described below for the specific claims.

## **B.2 Claims 1-3.**

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<sup>12</sup> Bejan: Col. 10, Ln. 5-7.

Claim 1 is independent. Claim 2 includes an additional limitation to claim 1 that is also not disclosed in Bejan and could be separately patented over claim 1. Claims 1 and 2, therefore, are argued separately below. The patentability of Claim 3 depends upon the patentability of claim 1.

#### **B.2.1 Claim 1.**

Bejan and other prior art discloses steps (a)–(f) of the method of claim 1. The issue regarding independent claim 1 is whether Bejan discloses claim steps (g) and (h), which are reproduced below for convenience:

- (g) producing one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene, each set of variation scenes being associated with a scene that is viewable after the linking scene; and
- (h) when the viewer is brought to a scene sequence that contains a set of variation scenes, interspersing into the scene sequence the variation scene corresponding to the viewer's selected one of the alternative decisions from among the alternative decisions presented prior to the linking scene.

A major shortcoming of the prior art, including Bejan, was solved by these two additional steps (g) and (h) of claim 1. Step (g) requires the production of sets of 'variation scenes' that can be used to subtly alter the content of scene sequences that may be viewed after passing a linking point. These 'variation scenes' are used to modify the content of certain scenes that follow a linking scene in order to make the modified scene reflect some consequence of the previous decisions made by the viewer.

Since each set of variation scenes is associated with a scene sequence that is viewable after the linking scene, step (h) provides that when the viewer is brought to a scene sequence that

contains a set of variation scenes, a step is performed to intersperse into the scene sequence the variation scene corresponding to the viewer's decisions presented prior to the linking scene. In other words, the right variation scene is selected and substituted into the scene sequence to make the dialog and expression appropriate to reflect the prior behavior.

Bejan does not teach steps (g) and (h). The Examiner cites only to the fact (undisputed) that the last decision in the multi-perspective scene fixes the particular character through whom the remainder of the episode is viewed.<sup>13</sup> That is different from and not included in the step of producing one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions prior to the linking scene, with each set of variation scenes being associated with a scene that is viewable after the linking scene. Nor is it included in the step of, when the viewer is brought to a scene sequence that contains a set of variation scenes, interspersing into the scene sequence the variation scene corresponding to the viewer's selected decisions presented prior to the linking scene. If a decision is made in Bejan to follow a particular character after the multi-perspective act, that decision controls only the set of scenes that can be selected and viewed after the decision, through the branching and linking scenes to the final credits. Whatever set of scenes are selected after the final character decision cannot then be varied by interspersing into the scene sequence a variation scene corresponding to the viewer's selected decisions presented prior to the linking scene.

For the above reasons, Bejan fails to show each and every feature of claim 1. Claim 1, therefore, is not anticipated by Bejan.

#### **B.2.2 Claim 2.**

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<sup>13</sup> Page 4 of Final Office Action mailed 22 June 2007.

The most prominent use for the “variation scenes” recited in step (g) is reflected in dependent Claim 2, which adds the step of ... *“producing the variation scenes in a set with essentially the same characters and props, such that the variation scenes in a set differ from each other by the dialog and expression of at least one character”*. This allows the scene sequence following a linking point to have a primary content, but by re-shooting a few of the exchanges between characters as a set of variation scenes, where one or more of the characters change his or her dialog or expression, the coded insertion of the appropriate scene from this set varies the emotional impact of the exchange in a way that carries over an implication of some consequence of the decisions or behavior of the characters in scenes that preceded the linking point.

Bejan does not teach this feature. For this additional reason, in addition to the above reasons for claim 1, Bejan does not anticipate claim 2.

Claim 3 depends from claim 1 and is, therefore, not anticipated for the same reasons as claim 1 above. For the foregoing reasons, claims 1-3 are not anticipated by Bejan.

### **B.3 Claims 4 and 6 stand as a group.**

Bejan does not allow acts to be viewed in different order based upon viewer selection. Other prior art does permit this function, but since Bejan does not, it is not surprising Bejan also does not disclose the additional steps which distinguish claim 4 and 6 over the prior art.

The technique of allowing acts to be viewed in different order based upon viewer selection is claimed in steps (b) and (c) of claim 4, as follows:

- (b) in at least one of the acts, presenting to the viewer alternative decisions that will determine an order in which at a subsequent act will be presented;

- (c) enabling the viewer to select one of the alternative decisions;

Bejan does not have this feature. The sample episode of Bejan is divided into parts: introduction, multi-perspective act, branching act and credits, in that order. Bejan qualifies this by explaining that an episode might have only one of those acts, and that the order could be reversed such that the multi-perspective act could follow the branching act.<sup>14</sup> However, Bejan does not disclose or suggest that the reversal of order would be determined by the selection of the viewer. All Bejan suggests is that the order of acts can be set up differently by the composer. The Examiner points to Figure 3, but that figure shows a single order: Introduction→ Branching Act→ Intersection Scene→ Credits. That order cannot be changed by viewer decisions.

It is not surprising then, that Bejan also does not disclose steps (d) (e) and (f) of claim 4.

- (d) in each act that can be presented in a different order, providing neutral scenes in which the content is not dependant upon the order in which the act is viewed, and providing sets of alternative scenes in which the content is dependant upon the order in which the act is viewed;
- (e) prompting the viewer to make one of the alternative decisions that will determine the order of a subsequent act; and
- (f) presenting to the viewer, in the act determined by his decision, neutral scenes of the act interspersed with alternative scenes that reflect the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer's selected one of the alternative decisions.

Bejan describes a technique of reducing video storage requirements by having portions of scenes on the videodisk available to be used in more than one scene, as in the example of a re-

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<sup>14</sup> Bejan: Col. 6, Ln. 52–Col. 7, Ln. 5.

usable scene portion showing a character walking a hallway.<sup>15</sup> These re-usable scene portions are ‘neutral’, since they can be used in more than one scene sequence (or act) without changing the storyline. The content of these re-usable scene portions, however, is constant no matter when one of them is viewed. Bejan does not disclose any ‘sets of alternative scenes in which the content is dependant upon the order in which the act is viewed’. Consequently, there is no disclosure of presenting neutral scenes...*“interspersed with alternative scenes that reflect the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer’s selected one of the alternative decisions”*.

Dependent claim 6 adds to the method of claim 4 further steps which give the ability of two or more interactive viewers to each make at least one decision that determines the order in which acts are presented. Since claim 4 is patentable over Bejan, so is claim 6.

#### **B.4 Claims 7 and 8 stand as a group.**

As discussed regarding claim 4 above, Bejan does not teach or suggest presentation of acts in different order. Bejan’s Figure 3, and the text describing Figure 3, do not disclose that acts can be presented in different by viewer selection. There is no way for the viewer to present the Intersection Scene before the Branching Act, nor to view any of the 3<sup>rd</sup> branch scenes before the 2<sup>nd</sup> branch, or to present a 4<sup>th</sup> branch scene before a 2<sup>nd</sup> and 3<sup>rd</sup> branch. The viewer can select which 2<sup>nd</sup> branch to view, and following that choice select which 3<sup>rd</sup> branch to view, but cannot select to view any 3<sup>rd</sup> branch before a 2<sup>nd</sup> branch.

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<sup>15</sup> Bejan , Col. 10, lines 12 to 21.

The Examiner's misinterpretation is that since a viewer can select any of multiple paths between linking scenes, the viewer has a choice of which "order" an act is viewed in.<sup>16</sup> The clear meaning of the term "order", however, is shown by the context in which it is used in claim 4:

(a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer in a plurality of acts, each act containing potentially viewable scenes;

(b) *in at least one of the acts, presenting to the viewer alternative decisions that will determine an order in which a subsequent act will be presented;*

In other words, within some act the viewer will make a decision that is not about whether to view or not view a subsequent act, but rather to determine when that subsequent act is to be viewed. It can be viewed immediately at that decision point or be deferred to a later viewing by choosing another act to view immediately, but the deferred act will still be available for viewing at the later time. Bejan does not do this. When you choose a 2<sup>nd</sup> level branch in Bejan, the other 2<sup>nd</sup> level choices are eliminated from later viewing.

The invention of claim 7 over other prior art (not Bejan) is that the method includes step (d) of providing alternative connecting scenes leading into and out of a scene that can be selected for viewing in different order, wherein the alternative connecting scenes contain content that is related to the order in which the act is selected, and step (f) of presenting the appropriate connecting scene after the viewer has selected the order of viewing the act.

Dependent claim 8 adds to the method of claim 7 several steps which give the ability of two or more interactive viewers to each make at least one decision that determines the order in which acts are presented. Since claim 7 is patentable over Bejan, so is claim 8

#### **B.5 Claims 9 and 10.**

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Claim 9 is an article claim having structural limitations that relate to the steps of method claim 1. The Examiner makes the same error as with his rejection of claim 1.<sup>17</sup> Bejan discloses only elements (a) through (d) of claim 9. Bejan does not disclose elements (e) and (f) of claim 9.

- (e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that corresponds to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for interspersing in a scene a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.

The Examiner originally cited to column 10, lines 1 to 25 of Bejan, which describes the method of reducing video storage requirements by having portions of scenes on the videodisk available to be used in more than one scene. These scene portions are not a form of the claimed "variation scenes". What is clearly missing is any suggestion to select or produce such scenes in sets, such that the content of the variation scenes in a set introduce content that reflects the consequences of previous decisions prior to a linking scene, and associating each set with a scene sequence following the linking scene. The Bejan neutral scene portions are merely used to show something (walking down a hall) that might be appropriate in several different scenes, but is not necessarily related to any consequence of previous decisions. Thus, claim 9 is not anticipated by Bejan.

Claim 10 claims the digital video storage medium of claim 9 in combination with a digital video player having: (a) means for enabling the viewer to make the alternative decisions,

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<sup>17</sup> Page 7 of Final Office Action mailed 22 June 2007

and (b) software able to interpret the data structure in the storage medium for presenting the scene sequences that corresponds to the viewer's decisions, for identifying when the viewer is brought to a scene sequence that contains a set of variation scenes, and for interspersing into that scene sequence the variation scene from the set that is related to the particular decision made. Since Claim 9 is patentable over Bejan, so is claim 10.

#### **B.6 Claim 18 and 20 stand as a group.**

Claim 18 has structural elements similar to the steps of method claim 4. As discussed with claim 4, Bejan does not allow acts to be viewed in different order based upon viewer selection. The Examiner relied upon Bejan's Figure 3 and text describing Figure 3, but it is clear from Figure 3 that the acts cannot be presented in different order. Hence, Bejan does not disclose element (b) of claim 18.

(b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;

It is not surprising then, that Bejan also does not disclose elements (c) and (d) of claim 18.

(c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and

(d) software-enabled coding for presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

The Examiner apparently regarded the scene portions described at Bejan col.10, lines 12-21 to be "neutral", since they can be used in more than one scene sequence (or act) without changing the storyline of that act. They are not "sets of alternative scenes in which the content is

dependant upon the relative order in which the act is viewed'. Consequently, there is no disclosure of presenting such an alternate scene in the act that is appropriate for the order in which the act is viewed. Thus, claim 18 is not anticipated by Bejan.

Claim 20 includes the digital video storage medium of claim 18, and adds a digital video player having means for enabling the viewer to make the alternative decisions, and software able to interpret the data structure in the storage medium for presenting to the viewer, in the acts determined by his decision, the act's neutral scenes interspersed with alternative scenes that are appropriate to the relative order in which the act is presented. Since Claim 18 is patentable over Bejan, so is claim 20.

**B.7 Dependent claims 21 and 22 stand as a group.**

Claims 21 and 22 are also dependent upon claim 18, and therefore patentable if 18 is. Claim 21 adds an additional ground of patentability, in that the selectable order acts (not disclosed in Bejan) have alternative connecting scenes leading into and out of the act. Claim 22 is dependent from 21.

**B.8 Claim 24.**

The Examiner erred in rejecting independent claim 24 as anticipated by Bejan. Bejan discloses elements (a) to (d), but does not disclose elements (e) and (f) of claim 24.

- (e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for identifying in a scene sequence a variation scene that is

selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.

As described previously, Bejan does disclose a method of reducing video storage requirements by having portions of scenes on the videodisk available to be used in more than one scene, using as an example a scene portion showing a character walking a hallway. The Examiner mistakes these re-usable scene portions to be a form of 'variation scene', since they can be used in more than one scene sequence. They are not variation scenes as claimed in element (c), since they do not introduce content that reflects the consequences of previous decisions made prior to a linking scene, and they are not provided in sets such that the appropriate scene can be selected from the set based upon its correspondence to decisions made prior to a linking scene.

Thus, claim 24 is not anticipated by Bejan.

#### **B.9 Claim 27.**

The Examiner erred in rejecting independent claim 27 based on Bejan, as Bejan does not disclose at least elements (b) (c) and (d) of claim 27.

- (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
- (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
- (d) software-enabled coding for presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

Bejan does not teach or suggest that the viewer can select the order in which acts are presented, as required by element (b). The Examiner relies upon Bejan Figure 3 and text describing Figure 3, but it is clear from Figure 3 that the viewer cannot select for the acts to be presented in different order. There is no way for the viewer to select to present the Intersection Scene before the Branching Act, nor any way for the viewer to select to view any of the 3<sup>rd</sup> branch scenes before the 2<sup>nd</sup> branch, or to present a 4<sup>th</sup> branch scene before a 2<sup>nd</sup> and 3<sup>rd</sup> branch. The viewer can select which 2<sup>nd</sup> branch to view, and from that choice select which 3<sup>rd</sup> branch to view, but cannot select to view any 3<sup>rd</sup> branch before a 2<sup>nd</sup> branch.

In addition, the content of the re-usable scene portions described in Bejan is constant no matter when one is viewed. They are not “sets of alternative scenes in which the content is dependant upon the order in which the act is viewed” as required in element (c). There is no disclosure or suggestion of presenting such re-usable scenes to the viewer in an act as an alternate scene that is appropriate for the order in which the act is viewed, as required in element (d). Thus, claim 27 is not anticipated by Bejan.

#### **B.10 Claim 30.**

The Examiner erred in rejecting independent claim 30 based on Bejan because Bejan does not disclose at least elements (e) and (f) of claim 30.

- e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for identifying in a scene sequence a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein

the selection is based upon previous decisions made prior to the linking scene.

As described above, the re-usable scene portions of Bejan are not sets of variation scenes that can be interspersed a scene sequences after the linking scene to make the scene sequence reflect the consequence of decision before the linking scene. Thus, claim 30 is neither anticipated or made obvious by Bejan.

#### **B.11 Claim 31.**

The Examiner erred in rejecting independent claim 31 based on Bejan because Bejan does not disclose at least elements (b) (c) and (d) of claim 31.

- (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
- (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
- (d) software-enabled coding presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

Bejan does not teach or suggest that the viewer can select the presentation of acts in different orders. In addition, the content of the re-usable scene portions described in Bejan is constant no matter when one is viewed. They are not “sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed”. Consequently, there is no disclosure or suggestion of presenting such neutral scenes that is appropriate for the order in which an act is viewed. Thus, claim 31 is neither anticipated or made obvious by Bejan.

**C. The Examiner erred in rejecting claims 18, 20-22, 27-29 and 31-34 under 35 U.S.C. 102 as being anticipated by Shiels et al (US 5,754,770).**

**C.1 Scope and Content of Shiels et al.**

The Examiner contends that Shiels discloses that acts are presented in different order, or A to G with four possible endings W, X, Y, and Z, based upon viewer decisions.<sup>18</sup> The Examiner is referring to Figure 6 and the text describing it in Column 6 of Shiels.

Branching and order selection are related, but different, interactive decisions. A branching decision at a node of choices eliminates the ability to view the non-selected branches; while an order-selecting decision preserves the ability to view the non-selected branch at a later time. The Shiels structure does not allow the viewer's decision to change the order in which an act is viewed. Figure 6 of Shiels, and the text related to it, show that the branching narrative can only move from beginning A toward alternative ends W, X, Y or Z (albeit by alternative paths), but the viewer never has the ability to change the order in which any of the acts are viewed. For example, if the video segment H to K is viewed, it must always be viewed before the segment or segment beginning at K, never after them. The Examiner cannot point to any place in Shields where a viewer can decide to reverse the order of acts. The viewer is unable to take an act that is viewed enroute to any point in the chosen path and chose to view it after that point instead of enroute to the point.

**C.2 Claim 18 and 20 stand as a group.**

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<sup>18</sup> Page 11 of Final office Action mailed 22 June 2007.

Claim 18 is not anticipated by Shiels, because Shiels does not disclose at least the following elements:

- (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
- (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
- (d) software-enabled coding for presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

The Examiner is misinterpreting the limitation “order” to mean path, rather than relative timing. The claim limitation “order” means the timing at which acts can be viewed relative to each other. That is clear from the plain meaning of the term and the context in which it is used in the application. Shiels does not allow the viewer’s decision to change the “order” (time in which an act is viewed relative to another act), as required by claim limitation (b).

The Examiner apparently regards the fact that some segments in Shiels can be reached by more than one path (for example, H can be reached by A-B-H or by A-D-E-H) to mean the segment can be presented in a different order. The ability to chose different paths to a point in the entertainment is not the same as having the ability to chose acts to be presented in a different order, as can be seen by comparison to Figure 8 of the present application. If the point A of Shiels’ Figure 6 corresponds to a starting point such as 403 in Applicant’s Figure 8, then Shiels provides no ability to see scene B before scene F. In fact, by selecting scene B in Shiels, the potential to see scene F is taken away. By contrast, a viewer’s selecting to first view the Art Museum scene of Figure 8 in this application does not eliminate the potential to select either the



City Park or the Mansion as subsequent scenes. They are available to be selected when the viewer chooses.

Consequently, Shiels does not disclose or suggest structuring of scene sequences as described in elements (c) and (d) of claim 18. Elements (c) and (d) recite that the data structure contains alternative scenes by which the neutral scenes of a moveable act can be supplemented, to the effect that regardless of whether the act is viewed before or after another act in the narrative, the insertion of the appropriate alternative scenes will make the act appear to fit naturally for the relative order in which it is viewed. This is not present in Shiels.

For example, while scenes H, J and K of Shiels can be reached by different decision paths, they do not contain sets of alternative scenes in which the content is dependant even upon the path taken to arrive there, much less upon the order in which the acts are viewed. There is no act in Shiels with this capability.

Shiels' ability to grab a scene sequence after viewing it, and then recall it by choice at some later time as a memory "flashback", is not the same or similar to providing sets of alternative scenes that can be inserted into an act to add content that is appropriate to the order in which the act is viewed.) Thus, claim 18 is neither anticipated or made obvious by Shiels.

Claim 20 includes the digital video storage medium of claim 18, and add a digital video player having means for enabling the viewer to make the alternative decisions, and software for presenting the scene sequences that corresponds to the viewer's decisions, for identifying when the viewer is brought to a scene sequence that contains a set of variation scenes, and for interspersing into that scene sequence the variation scene from the set that is related to the particular decision made. Since Claim 18 is patentable over Shiels, so is claim 20.

### **C.3 Dependent claims 21 and 22 stand as a group.**

Claims 21 and 22 are dependent upon claim 18, and therefore patentable if 18 is. Claim 21 adds an additional ground of patentability, in that the selectable order acts (not disclosed in Shiels) have alternative connecting scenes leading into and out of the act. Claim 22 is dependent from 21.

#### **C.4 Claims 27-29.**

Claims 27-29 are not anticipated by Shiels because Shiels does not disclose an interactive entertainment having at least the following elements:

- (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
- (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
- (d) software-enabled coding for presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

As described above, element (b) demonstrates why the Shiels entertainment structure does not allow the viewer's decision to change the order in which an act is viewed. There is no decision point in Shiels at which the alternative decision will determine an order in which a subsequent act will be presented. Once a decision is made as to which act to view next, the other acts available at the decision point choices are eliminated from being chosen downstream.

Elements (c) and (d) provide the use of alternative scenes to make the act appropriate to the relative order in which the act is viewed. Shiels provides the audience with means to make the alternative decisions that determine a sequence of acts to be viewed, but it does not disclose

any means for presenting neutral scenes interspersed with alternative scenes that are appropriate to the relative order in which the act is presented. Claims 28 and 29 depend from claim 27.

None of claims 27-29 is anticipated by Shiels.

#### **C.5 Claim 31.**

Claim 31 is not anticipated because Shiels does not disclose an interactive entertainment embodied in an electronic format encoded with a readable data structure to be transmitted to a viewer over a broadcast network having at least the following elements:

- (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
- (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
- (d) software-enabled coding presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

These elements are similar or identical to the corresponding elements (b) - (d) of claim 27, so the same analysis applies. Claims 31 is not anticipated by Shiels.

#### **C.6 Claims 32 and 33 stand as a group.**

Claim 32 is not anticipated because Shiels does not disclose a method for providing interactive entertainment in periodic serial format (episodes) at all, much less one having the following steps:

- (b) in at least one of the episodes, presenting to the viewer alternative decisions that will determine an order in which a subsequent episode will be presented;

- (d) in each episode that can be presented in a different order, providing alternative connecting scenes leading into and out of the episode;
- (e) prompting the viewer to select one of the alternative decisions that will determine the order of a subsequent episode;
- (f) presenting to the viewer, in the subsequent episode determined by his decision, the alternative connecting scenes that are appropriate to the order in which the episode is presented.

Shiels does not disclose or suggest a method for providing interactive entertainment which includes the steps of providing the entertainment in episodes and allowing the viewer to make alternative decisions that will determine an order in which a subsequent episode will be presented. Consequently, Shiels also does not disclose or suggest the steps of providing alternative connecting scenes leading into and out of the episode, and presenting the viewer the connecting scenes that are appropriate to the order in which the episode is presented. At each decision point in Shiels, a viewer can select between alternative choices of which section to view, but making that selection does not change the selected section. By steps (d) and (f) above, the present invention changes the selected section (episode) by applying connecting scenes leading into and out of the episode from a group of alternative connecting scenes, to make the transition into and out of the episode appropriate for the order in which the episode is viewed. Dependent claim 33 is not anticipated for the same reason as Claim 32.

#### **C.7 Claim 34.**

Claim 34 is not anticipated because Shiels does not disclose or suggest an interactive entertainment delivered to a viewer as a plurality of periodic episodes, having at least the following steps:

- (c) each episode that can be presented in a different order having neutral scenes in

which the content is not dependant upon the relative order in which the episode is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the episode is viewed; and

- (d) means for presenting to the viewer one or more of such alternative scenes in the act to provide the alternative content in the act that is appropriate for the order in which the act is viewed.

Shiels does not provide sets of alternative scenes to be presented in the act to provide alternative content in the act that is appropriate for the order in which the act is viewed.

**D. The Examiner erred in rejecting claims 11, 13, 14, 16, 17, 25 and 26 under 35 U.S.C. 103(a) as being unpatentable over Bejan in view of Shiels.**

**D.1 Claims 11, 13, 14, 16, and 17 stand as a group, but their patentability lies in claim 9.**

Claims 11, 13, 14, 16 and 17 depend from claim 9 (through claim 10) reciting several forms of digital video players. Shiels is cited by the Examiner for the purposes of showing the various forms of digital video players recited in these claims.<sup>19</sup> The Applicant does not contend that the particular form of digital video player is a separate ground of patentability. These claims are patentable because the necessary teaching of claims 9 and 10 is not provided by the asserted combination of Bejan and Shiels.

Bejan, which is discussed above, does not disclose or suggest elements (e) and (f) of claim 9.

- (e) one or more sets of variation scenes that introduce content that reflects the

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<sup>19</sup> Section 15 of the Final Office Action mailed 22 June 2007

- consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that corresponds to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for interspersing in a scene sequence a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.

As discussed above, Bejan is clearly lacking the necessary teaching of providing sets of variation scenes introducing content that reflects the consequences of previous decisions prior to a linking scene and associating each set of variation scenes with a scene sequence that follows the linking scene. Bejan teaches at column 10, lines 1 to 25 a method of reducing video storage requirements by having portions of scenes on a videodisk available to be used in more than one scene. As discussed above, these scene portions show something that might be appropriately used in different scenes, but do not *provide content that reflects the consequence of previous decisions* as required by claim 9.

**D.2 Claims 25 and 26 stand as a group, but their patentability lies in claim 24.**

Claims 25 and 26 depend from claim 24, respectively reciting that interactive entertainment is transmitted to a viewer over a communications network in real time or is transmitted over a communications network and stored on a storage device. With respect to claims 25 and 26, Shiels is cited by the Examiner for the purposes of showing the features of the

interactive entertainment being transmitted over a communications network to a viewer, or stored on a storage device, as recited in these claims.<sup>20</sup>

Bejan, as discussed previously, fails to disclose or suggest elements (e) and (f) of claim 24.

- (e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for identifying in a scene sequence a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.

Again, as discussed above, Bejan's method of reducing video storage requirements by having portions of scenes on a videodisk available to be used in more than one scene does not suggest *variation scenes that introduce content that reflects the consequences of previous decisions*. The necessary teaching lacking in Bejan is not provided by Shiels.

**E. The Examiner erred in rejecting claims 12 and 15 under 35 U.S.C. 103(a) as being unpatentable over Bejan in view of Abecassis (US 6,553,178).**

Claims 12 and 15 depend from claim 9 (through claim 10), reciting different forms of digital video players. Abecassis is cited by the Examiner for the purposes of showing the forms

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<sup>20</sup> Section 15 of the Final Office Action mailed 22 June 2007

of digital video players recited in claims 12 and 15.<sup>21</sup> The Applicant does not contend that the particular form of digital video player is a separate ground of patentability. These claims are patentable because the necessary teaching of claims 9 and 10 is not provided by the asserted combination of Bejan and Abecassis.

Bejan does not disclose or suggest elements (e) and (f) of claim 9.

- (e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that corresponds to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for interspersing in a scene sequence a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.

Again, as discussed above, Bejan is lacking the necessary teaching of claims 12 and 15 (through claims 9 and 10) of *variation scenes that introduce content that reflects the consequences of previous decisions*. Bejan's method of reducing video storage requirements by having portions of scenes on a videodisk available to be used in more than one scene does not suggest the claimed variation scenes introducing content reflecting consequences of previous decisions. The necessary teaching lacking in Bejan is not provided by Abecassis.

**F. The Examiner erred in provisionally rejecting claim 1 for nonstatutory obviousness-type double patenting of claim 1 of co-pending application 10/003,187 in view of Abecassis.**

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<sup>21</sup> Section 16 of the Final Office Action mailed 22 June 2007



Co-pending application 10/003,187 does not claim steps (g) and (h) of claim 1 of the present application.

- (g) producing one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene, each set of variation scenes being associated with a scene that is viewable after the linking scene; and
- (h) when the viewer is brought to a scene sequence that contains a set of variation scenes, interspersing into the scene sequence the variation scene corresponding to the viewer's selected one of the alternative decisions from among the alternative decisions presented prior to the linking scene.

The Examiner erred in provisionally rejecting claim 1 of the present application for nonstatutory obviousness-type double patenting.

**G. Rejection of Claims Under 35 U.S.C. 112 Not an Issue.**

Section 8 of the Final Office Action mailed 22 June 2007 includes a rejection of claims under 35 U.S.C. 112. This rejection is based on the appearance of bracket formatting (instead of strike-through) in amended claims included with a response to the Office Action mailed 17 November 2006. The Examiner, however, identified that examination would be made under the assumption that deletion of the bracketed words from the claim was intended. The Examiner's assumption was correct.

**8. CONCLUSION**

Appellants respectfully submit that the Examiner erred:

in rejecting claims 9-18, 20-22, 24-31 and 34 as being unpatentable subject matter under 35 U.S.C. 101;

in rejecting claims 1-4, 6-10,18, 20-22, 24, 27, 30 and 31 under 35 U.S.C. 102 as being anticipated by Bejan et al (US 5,465,384); in rejecting claims 18, 20-22, 27-29 and 31-34 under 35 U.S.C. 102 as being anticipated by Shiels et al (US 5,754,770);

in rejecting claims 11, 13, 14, 16, 17, 25 and 26 under 35 U.S.C. 103(a) as being unpatentable over Bejan in view of Shiels;

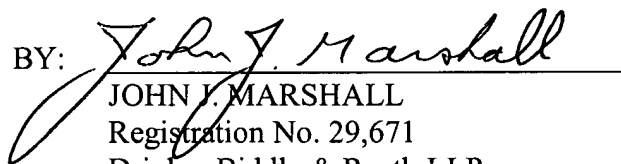
in rejecting claims 12 and 15 under 35 U.S.C. 103(a) as being unpatentable over Bejan in view of Abecassis (US 6,553,178); and

in provisionally rejecting claim 1 for nonstatutory obviousness-type double patenting of claim 1 of co-pending application 10/003,187 in view of Abecassis.

Respectfully submitted,

KENT MASSEY

BY:

A handwritten signature in cursive script, reading "John J. Marshall", is written over a horizontal line.

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## CLAIMS APPENDIX

For the Board's convenience, this appendix paper includes the text of all claims under examination in the form in which they were rejected. Claims that have been cancelled or withdrawn in prior actions have been omitted.

1. A method for structuring scene sequences for interactive entertainment, the method comprising the steps of:
  - (a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer;
  - (b) delivering some of the scenes to the viewer as branching points at which alternative decisions are presented that will determine the next scene sequence to be presented to the viewer;
  - (c) for each alternative decision at a branching point, having available to present to the viewer a scene sequence corresponding to the decision;
  - (d) enabling the viewer to select one of the alternative decisions;
  - (e) in response to the viewer's selected one of the alternative decisions, presenting the scene sequence that corresponds to the decision;
  - (f) structuring the branching points and their related scene sequences such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene;
  - (g) producing one or more sets of variation scenes that introduce content that reflects the

consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene, each set of variation scenes being associated with a scene that is viewable after the linking scene; and

- (h) when the viewer is brought to a scene sequence that contains a set of variation scenes, interspersing into the scene sequence the variation scene corresponding to the viewer's selected one of the alternative decisions from among the alternative decisions presented prior to the linking scene.

2. The method of claim 1, further comprising the step of producing the variation scenes in a set with essentially the same characters and props, such that the variation scenes in a set differ from each other by the dialog and expression of at least one character.
3. The method of claim 1 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of:
  - (a) delivering some of the scenes to each interactive viewer as branching points at which alternative decisions are presented that will determine the next scene sequence to be presented; and
  - (b) enabling different interactive viewers to make at least one of the alternative decisions.
4. A method for structuring scene sequences for interactive entertainment, the method comprising the steps of:
  - (a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer in a plurality of acts, each act containing potentially viewable scenes;

- (b) in at least one of the acts, presenting to the viewer alternative decisions that will determine an order in which at a subsequent act will be presented;
  - (c) enabling the viewer to select one of the alternative decisions;
  - (d) in each act that can be presented in a different order, providing neutral scenes in which the content is not dependant upon the order in which the act is viewed, and providing sets of alternative scenes in which the content is dependant upon the order in which the act is viewed;
  - (e) prompting the viewer to make one of the alternative decisions that will determine the order of a subsequent act; and
  - (f) presenting to the viewer, in the act determined by his decision, neutral scenes of the act interspersed with alternative scenes that reflect the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer's selected one of the alternative decisions.
6. The method of claim 4 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of:
- (a) presenting to each interactive viewer alternative decisions that will determine an order in which a different subsequent act will be presented; and
  - (b) enabling each interactive viewer to make at least one of the alternative decisions.
7. A method for structuring scene sequences for interactive entertainment, the method comprising the steps of:
- (a) providing a plurality of potentially viewable scenes to deliver an overall storyline to

- a viewer in a plurality of acts, each act containing potentially viewable scenes;
  - (b) in at least one of the acts, presenting to the viewer alternative decisions that will determine an order in which a subsequent act will be presented;
  - (c) enabling the viewer to select one of the alternative decisions;
  - (d) in each act that can be presented in a different order, providing alternative connecting scenes leading into and out of the act, wherein the alternative connecting scenes contain content that is related to the order in which the act is selected for viewing ;
  - (e) prompting the viewer to make one of the alternative decisions that will determine the order of a subsequent act; and
  - (f) presenting to the viewer, in the subsequent act determined by his decision, the alternative connecting scenes that reflect the order in which the act is selected for viewing.
8. The method of claim 7 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of:
- (a) presenting to each interactive viewer alternative decisions that will determine an order in which a different subsequent act will be presented; and
  - (b) enabling each interactive viewer to make at least one of the alternative decisions.
9. An interactive entertainment embodied in a digital video storage medium with a data structure readable by a digital video player, and having an overall storyline to be delivered to a viewer, said data structure comprising:
- (a) a plurality of potentially viewable scenes;

- (b) some of the scenes defining branching points of the entertainment by presenting alternative decisions from which the viewer selects one of the alternative decisions;
- (c) for each alternative decision at a branching point, a sequence of scenes corresponding to the decision;
- (d) the branching points and their related scene sequences being structured such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene;
- (e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that corresponds to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for interspersing in a scene sequence a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.

10. An interactive entertainment system including, in combination, the digital video storage medium of claim 9, and a digital video player having:

- (a) means for enabling the viewer to make the alternative decisions, and
- (b) software able to interpret the data structure in the storage medium for presenting the scene sequences that corresponds to the viewer's decisions, for identifying when the

viewer is brought to a scene sequence that contains a set of variation scenes, and for interspersing into that scene sequence the variation scene from the set that is related to the particular decision made.

11. An interactive entertainment system as in claim 10, wherein the digital video player is a general purpose computer and monitor.
12. An interactive entertainment system as in claim 10, wherein the digital video player is a game player and television.
13. An interactive entertainment system as in claim 10, wherein the digital video player is a set-top box and a television.
14. An interactive entertainment system as in claim 10, wherein the digital video player is a personal video recorder having digital storage capability and a television.
15. An interactive entertainment system as in claim 10, wherein the digital video player is a computer and a television.
16. An interactive entertainment system as in claim 10, wherein the digital video player is a television having computing capability, wherein the television is adapted to present digital video to a user.
17. An interactive entertainment system as in claim 10, wherein the digital video player is a cable television system having a computer located at its head-end and a television.
18. An interactive entertainment embodied in a digital video storage medium with a data



structure readable by a digital video player, and having an overall storyline to be delivered to a viewer, said data structure comprising:

- (a) a plurality of potentially viewable scenes grouped as a plurality of acts;
- (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
- (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
- (d) software-enabled coding for presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

20. An interactive entertainment system including, in combination, the digital video storage medium of claim 18 and a digital video player, comprising:

- (a) means for enabling the viewer to make the alternative decisions that determine the order of the selectable-order acts; and
- (b) software able to interpret the data structure in the storage medium for presenting to the viewer, in the acts determined by his decision, the act's neutral scenes interspersed with alternative scenes that are appropriate to the relative order in which the act is presented.

21. The interactive entertainment of claim 18, wherein the selectable-order acts have alternative connecting scenes leading into and out of the act.

22. An interactive entertainment system including in combination the digital video storage medium of claim 21 and a digital video player, comprising:
- (a) means for enabling the viewer to make the alternative decisions that determine the order of the selectable-order acts; and
  - (b) software able to interpret the data structure in the storage medium for presenting to the viewer, in the acts determined by his decision, the connecting scenes appropriate to the order in which the act is presented.
24. An interactive entertainment embodied in an electronic format with a readable data structure and having an overall storyline to be transmitted to a viewer over a communications network, said interactive entertainment comprising:
- (a) a plurality of potentially viewable scenes;
  - (b) some of the scenes defining branching points of the entertainment by presenting alternative decisions from which the viewer selects one of the alternative decisions;
  - (c) for each alternative decision at a branching point, a sequence of scenes corresponding to the decision;
  - (d) the branching points and their related scene sequences being structured such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene; and
  - (e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer's selected one

- of the alternative decisions, each set of variation scenes being associated with a scene sequence that is viewable after the linking scene, and
- (f) software-enabled coding for identifying in a scene sequence a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.
25. The interactive entertainment of claim 24 wherein the interactive entertainment is transmitted to a viewer over a communications network in real time.
26. The interactive entertainment of claim 24 wherein the interactive entertainment is transmitted to a viewer over a communications network and stored on a storage device.
27. An interactive entertainment embodied in an electronic format with a readable data structure and having an overall storyline to be transmitted to a viewer over a communications network, said interactive entertainment comprising:
- (a) a plurality of potentially viewable scenes grouped as a plurality of acts;
  - (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
  - (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
  - (d) software-enabled coding for presenting to the viewer an alternate scene in the act

that is appropriate for the order in which the act is viewed.

28. The interactive entertainment of claim 27 wherein the interactive entertainment is transmitted to a viewer over a communications network in real time.
29. The interactive entertainment of claim 27 wherein the interactive entertainment is transmitted to a viewer over a communications network and stored on a storage device.
30. An interactive entertainment embodied in an electronic format with a readable data structure and having an overall storyline to be transmitted to a viewer over a broadcast network, said interactive entertainment comprising:
  - (a) a plurality of potentially viewable scenes;
  - (b) some of the scenes defining branching points of the entertainment by presenting alternative decisions which must be made by the viewer;
  - (c) for each alternative decision at a branching point, a sequence of scenes corresponding to the decision;
  - (d) the branching points and their related scene sequences being structured such that essentially every set of scene sequences determined by viewer decisions eventually reaches at least one linking scene containing content that is not dependant upon the particular decisions made prior to the linking scene;
  - (e) one or more sets of variation scenes that introduce content that reflects the consequences of previous decisions selected from among the alternative decisions presented prior to the linking scene and that correspond to the viewer's selected one of the alternative decisions, each set of variation scenes being associated with a

scene sequence that is viewable after the linking scene, and

- (f) software-enabled coding for identifying in a scene sequence a variation scene that is selected from a set of variation scenes associated with that scene sequence, wherein the selection is based upon previous decisions made prior to the linking scene.

31. An interactive entertainment embodied in an electronic format with a readable data structure and having an overall storyline to be transmitted to a viewer over a broadcast network, said interactive entertainment comprising:

- (a) a plurality of potentially viewable scenes grouped as a plurality of acts;
- (b) at least one of the acts having a scene that presents to the viewer at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent act will be presented;
- (c) each act that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the act is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the act is viewed; and
- (d) software-enabled coding presenting to the viewer an alternate scene in the act that is appropriate for the order in which the act is viewed.

32. A method for providing interactive entertainment in periodic serial format, the method comprising the steps of:

- (a) providing a plurality of potentially viewable scenes to deliver an overall storyline to a viewer in a plurality of periodic episodes, each episode containing potentially viewable scenes;

- (b) in at least one of the episodes, presenting to the viewer alternative decisions that will determine an order in which a subsequent episode will be presented;
  - (c) enabling the viewer to select one of the alternative decisions;
  - (d) in each episode that can be presented in a different order, providing alternative connecting scenes leading into and out of the episode;
  - (e) prompting the viewer to select one of the alternative decisions that will determine the order of a subsequent episode;
  - (f) presenting to the viewer, in the subsequent episode determined by his decision, the alternative connecting scenes that are appropriate to the order in which the episode is presented.
33. The method of claim 32 in which the entertainment may be viewed simultaneously by more than one interactive viewer, further comprising the steps of:
- (a) presenting to each interactive viewer alternative decisions that will determine an order in which a different subsequent episode will be presented; and
  - (b) enabling each interactive viewer to make at least one of the alternative decisions.
34. An interactive entertainment embodied in a digital video storage medium with a data structure and readable by a digital video player, and having an overall storyline to be delivered to a viewer, said data structure comprising:
- (a) a plurality of potentially viewable scenes grouped as a plurality of periodic episodes;
  - (b) at least one of the episodes having a scene that presents to the viewer a at least one set of alternative decisions from which the viewer selects one of the alternative decisions that will determine an order in which a subsequent episode will be

presented;

- (c) each episode that can be presented in a different order having neutral scenes in which the content is not dependant upon the relative order in which the episode is viewed, and sets of alternative scenes in which the content is dependant upon the relative order in which the episode is viewed; and
- (d) means for presenting to the viewer one or more of such alternative scenes in the act to provide the alternative content in the act that is appropriate for the order in which the act is viewed.

## **EVIDENCE APPENDIX**

NONE



## **RELATED PROCEEDINGS APPENDIX**

NONE